APPENDIX B

CURRICULUM VITAE

Raymond M. Welsh, Ph.D.
S.S. No. 029-32-4074

Personal Data:

Date of birth: December 28, 1945
Place of birth: Montague City, Massachusetts

Education:

University of Massachusetts, Amherst, B.S., 1967 (Microbiology)

University of Miami, Coral Gables, 1967-1968 (Microbiology)

Rensselaer Polytechnic Institute, Troy, N.Y., June 1971
December 1971 (Biology/Virology)

University of Massachusetts, Amherst, Ph.D., 1972 (Microbiology/Virology)

Professional Record:

Biologist, U.S. Army Natick Laboratories, Natick, MA, Feb. 1968-Sept. 1968.

Postdoctoral Research Assoc., Dept. of Microbiology, Univ. of Kansas, Lawrence, Kansas, Feb. 1972-Aug. 1973.

Visiting Assistant Professor, Univ. of Kansas, Aug. 1972-May 1973.

Research Fellow, Dept. of Exp. Pathol., Scripps Clinic and Research Foundation, La Jolla, CA, July 1973-July 1975.

Assistant Member I Dept. of Immunopathol., S.C.R.F., July 1975-June 1977.

Assistant Member II Dept. of Immunopathol., S.C.R.F., July 1977-June 1980.

Visiting Scientist, Dept. of Tumor Biology, Karolinska Institute, Stockholm, Sweden, Oct. 1979-Dec. 1979.

Adjunct Associate Professor, Dept. of Pathology, Univ. of California at San Diego, La Jolla, CA, March 1980-Sept. 1980.

Associate Professor, Dept. of Pathology and the Dept. of Molecular Genetics and Microbiology, University of Massachusetts Medical School, Worcester, MA 01655, July 1980-June 1985.

Professor, Dept. of Pathology and the Dept. of Molecular Genetics and Microbiology, University of Massachusetts Medical School, Worcester, MA, 10655, July 1985-present.

Chairman, Interdepartmental Immunology and Virology program at UMMC (1992-1994; 1983-84); Vice-Chairman (1990-1992);

Visiting Scientist, Scripps Clinic, La Jolla, CA, 3/87-8/87.

Research Awards:

NIH R01 AI-17672, Immunity and Virus Disease, 1974-2009, with additional 5 yr MERIT award extension to 2014, Principal Investigator, 25% ($250,000/current yr)

NIH (PO1) NS-12428, Pathogenesis of MS and ALS, 1973-1980, Co Investigator, Project leader.

NIH R01 AI-00253, Maintenance of Chronic Virus Disease, 1978-1983, Research Career Development Award.

NIH R01 CA-34461, Regulation of Natural Killer Cells, 1983-2006, Principal Investigator, 20% ($169,000/current yr)

NIH R01 AR-35506, Virus-Induced Immunopathology, 1985-2009, Principal Investigator, 20% ($250,000/current yr))

NIH R37 AI07349, Training in Immunology, 1992-2007, Principal Investigator (Training Grant for Immunology/Virology Program). ($264,176/current yr)

NIH PO1 AI46629, Viral infection influence on transplantation tolerance, 1999-2008, Co-investigator (project leader), 10%.($191,826/current yr)

NIH PO1 AI49320, Ontogeny and maintenance of virus-specific T cells, 2001-2006, Co-investigator, 5% salary of $122,003 to L.K.Selin

NIH U19 AI57330, Orthopox immunization in normals and patients with cancer, 2003-2008, Co-investigator, 10% ($147,991/current yr)

Professional Organizations:

American Association for the Advancement of Science
American Association of Immunologists

American Society of Microbiology
American Society of Virology

Boards and Committees:

Editorial Board, Journal of Immunology, (1980-1984) (1997-Present) Proceedings of the Society for Experimental Biology and Medicine, (1977-1988), Natural Immunity and Cell Growth Regulation (1983-present), Journal of Virology (1986-1988; 1991-present, Editor, 1997-present), J Natl Cancer Inst (1988-1990), Virology (1996-Present)

Arenavirus study group of the International Committee on Virus Nomenclature.

Grant Review study section of the Massachusetts Chapter of the American Cancer Society, 1981-1991; Chairman 1985-1991. Chairman of ACS Professional Scientific Advisory Committee (1994-1998); Worcester delegate on the Board of Directors, ACS, Massachusetts Division; Scientific Advisory Board for the New England Divison of the ACS (to present)

Grant Review study section of the State of California AIDS Task Force, 1985-1996.

Grant Review National ACS study section: Immunology and Immunotherapy, 1988-1991.

NIH Virology Study Section, 1991-1995.

TRAINEES

FORMER TRAINEES:

1. Christine A. Biron, Ph.D. University of North Carolina (postdoc), current position: Professor and Chair, Dept. Of Mol. Microbiol. Immunol.,Brown University, Providence, RI.

2. Wendy Parker, Ph.D. Harvard University (postdoc), current position: incapacitated due to head injury.

3. Hyekyung Yang, Ph.D. University of Illinois (postdoc), current position: Staff Scientist, Bristol-Myers Co., Wallingford, CT.

4. Jack F. Bukowski, Ph.D., M.D. University of Massachusetts Medical Center (predoc and 1 yr postdoc), current position: Assistant Professor, Harvard University

5. Kim W. McIntyre, Ph.D., University of Massachusetts Medical Center (predoc and 6 mo postdoc), current position: Principle Investigator, Bristol-Myers Squibb, Princeton, NJ.

6. Robert J. Natuk, Ph.D., Rutgers University (postdoc), current position: Principle Research Scientist, Wyeth, Pearl River, NY

7. Mauricio Vargas-Cortes, Ph.D., University of Stockholm (postdoc), current position: Director of Clinical Development, Eli Lilly, Indianapolis

8. Hugh I. McFarland, Ph.D., Wright State University (postdoc), current position: Staff Scientist, Food and Drug Administration, Bethesda

9. Jeffery Brubaker, Ph.D., Worcester Polytechnic Institute (predoc), current position: unknown

10. Randy Brutkiewicz, Ph.D., University of Massachusetts Medical Center (predoc), current position: Associate Professor, Indiana University

11. Sharon Nahill, Ph.D., University of Massachusetts Medical Center (predoc), current position: Associate Science Director, Genzyme, Boston, MA.

12. Enal Razvi, Ph.D., University of Massachusetts Medical Center, current position: Vice-president, Business Development, DiscoveRx Corp, Fremont, CA.

13. Liisa Selin, M.D., F.R.C.P. (C), Dalhousie University., Ph.D., University of Manitoba. (postdoc), current position: Associate Professor, UMass Medical School, Worcester.

14. Barbara Lohman, Ph.D., U.C. Davis (postdoc), current position: AIDS epidemiologist, Nairobi

15. Christopher Zarozinski, Ph.D. University of Massachusetts Medical Center (predoc), current position: Scientist, Schliecher & Schuell Bioscience, Keene, NH

16. Chin-Hun Tay, Ph.D. University of Massachusetts Medical School (predoc),Drug Safety Assessment Manager, Synta Pharmaceuticals, Lexington, MA

17. Steven Varga, Ph.D., University of Massachusetts Medical School (predoc), current position : Assistant Professor, University of Iowa

18. Meei-Yun Lin, Ph. D., University of Massachusetts Medical School (predoc), current position, Director of Technology Dept., VIA Cord Blood Stem Foundation, Taiwan

19. James McNally, Ph.D., Louisiana State University (postdoc), current position, Staff Scientist, Repligen, Needham

20. Hong Chen, Ph. D., University of Massachusetts Medical School (predoc), current position, Staff Scientist, Antigenics, Woburn, MA

21. Xiaoting Wang, Ph. D., University of Massachusetts Medical School (predoc), current position, postdoctoral fellow, La Jolla Institute for Allergy and Immunology,

22. Markus Cornberg, M.D., University of Hannover (postdoc), current position: University of Hannover Hospital

23. Michael Brehm, Ph.D., Penn State Medical Center (postdoc), current position: Assistant Professor, University of Massachusetts Medical School

24. Craig Peacock, Ph.D., Queen Elizabeth II Medical Center (postdoc), current position: Research Associate, Johns Hopkins, Baltimore

25. Sung-Kwon Kim, Ph.D., University of Connecticut Medical Center (postdoc), current position: Senior Scientist, Valeant Pharm. Int., Costa Mesa, CA

CURRENT TRAINEES:

1. Susan Stepp, Ph.D., Univ. Texas Southwest (postdoc)

2. Evan Jellison, B.S., Stonehill College (predoc)

3. Kapil Bahl, B.S., Bates (predoc)

4. Alex Chen, B.S., U. Western Ontario, B.S. (predoc)

5. Heather Marshall, B.S., Rochester Inst. Technology (predoc)

6. Mina Seedhom, B.A., Clark (predoc)

7. Heath Guay, Ph.D., University of Pennsylvania (postdoc)

8. Sue-Jane Lin, Ph.D., National Yang-Ming University, Taipei (postdoc)

TEACHING EXPERIENCE

1968-69	Teaching assistant for general microbiology laboratory and for virology laboratory courses (Department of Microbiology, UMass, Amherst).
1972-73	Twice taught complete 40 lecture course in general microbiology to undergraduates (Department of Microbiology, U. Kansas). Seminar course on slow virus infections (KU).
1980	Participated in laboratory course in virology for medical students at

University of California at San Diego.

1981-present Courses at the University of Massachusetts Medical Center:

Medical student microbiology - an average of 6-9 lectures/year in immunology, virology, and bacteriology.

Graduate student virology - coordinator and major lecturer each year - 20 hr. lectures per year.

Graduate student advanced immunology - 3 hours of lectures/year.

SERVICE AND COMMITTEES AT UMASS MEDICAL SCHOOL

Institutional Biosafety Committee (1981-present; chairman for 5 years; current vice-chairman)

Tenure Committee (2000-present)

Graduate Council (1981-1997; served as chairman 1 yr and chairman of admissions committee 1 yr; chair of curriculum committee for several years)

Interdepartmental Immunology and Virology Committee, 1981-present, chair on two different occasions; currently chair of the Steering Committee that oversees the IV training program and P.I. of the Training Grant

Various other departmental space, personnel action, and search committees

BIBLIOGRAPHY

R.M. Welsh

Papers:

1. Welsh, R.M., R.S. Trowbridge, J.B. Kowalski, C.M. O'Connell and C.F. Pfau. 1971. Amantadine hydrochloride inhibition of early and late stages of lymphocytic choriomeningitis virus-cell interactions. Virology, 45:679-686.

2. Welsh, R.M. and C.J. Pfau. 1972. Determinants of lymphocytic choriomeningitis interference. J. Gen. Virol., 14:177-187.

3. Welsh, R.M. 1972. Defective-interfering lymphocytic choriomeningitis virus. Doctoral dissertation, Univ. of Mass., Amherst.

4. Staneck, L.D., R.S. Trowbridge, R.M. Welsh, E.A. Wright and C.J. Pfau. 1972. Arenaviruses: cellular response to long-term in vitro infection with Parana and lymphocytic choriomeningitis viruses. Infect. Immun. 6:444-450.

5. Pfau, C.J., R.S. Trowbridge, R.M. Welsh, L.D. Staneck and C.M. O'Connell. 1972. Arenaviruses: inhibition by amantadine hydrochloride. J. Gen. Virol., 14:209-211.

6. Welsh, R.M., C.M. O'Connell and C.J. Pfau. 1972. Properties of defective lymphocytic choriomeningitis virus. J. Gen. Virol. 17:355-359.

7. Pfau, C.J., R.M. Welsh and R.S. Trowbridge. 1973. Plaque assays and current concepts of regulation in arenavirus infections. In: F. Lehmann-Grube, ed., Lymphocytic Choriomeningitis Virus and Other Arenaviruses, Springer Verlag, New York, pp. 101-111.

8. Oldstone, M.B.A., R.M. Welsh and B.S. Joseph. 1975. Pathogenic mechanisms of tissue injury in persistent viral infections. Ann. N.Y. Acad. Sci. 256:65-72.

9. Welsh, R.M., N.R. Cooper, F.C. Jensen and M.B.A. Oldstone. 1975. Human serum lyses RNA tumor viruses. Nature 257:612-614.

10. Welsh, R.M., P.A. Burner, J.J. Holland, M.B.A. Oldstone, H.A. Thompson and L.P. Villarreal. 1976. A comparison of biochemical and biological properties of standard and defective lymphocytic choriomeningitis virus. Int. Symp. on Arenaviral Infections of Public Health Importance, Atlanta, GA, W.H.O. Bull. 52:403-408.

11. Jensen, F.C., R.M. Welsh, N.R. Cooper and M.B.A. Oldstone. 1976. Lysis of oncornaviruses by human serum. 8th Int. Cong. of Assoc. for Comparative Res. on Leukemia, Copenhagen, Oct. 1975. Bibl. Haematol. 43:438-440.

12. Oldstone, M.B.A., L.H. Perrin and R.M. Welsh. 1976. Potential pathogenic mechanisms of injury in amyotrophic lateral sclerosis. In: J.M. Andrews, R.T. Johnson, M.A.B. Brazier, eds., Amyotrophic Lateral Sclerosis: Recent Research Trends, No. 19, Academic Press, New York, pp. 251-262.

13. Welsh, R.M., P.W. Lampert, P.A. Burner and M.B.A. Oldstone. 1976. Antibody-complement interactions with purified lymphocytic choriomeningitis virus. Virology 73:59-71.

14. Welsh, R.M., F.C. Jensen, N.R. Cooper and M.B.A. Oldstone. 1976. Inactivation and lysis of oncornaviruses by human serum. Virology 74:432-440.

15. Holland, J.J., L.P. Villarreal, R.M. Welsh, M.B.A. Oldstone, D. Kohne, R. Lazzarini and E. Scolnick. 1976. Long term persistent vesicular stomatitis virus and rabies virus infection of cells in vitro. J. Gen. Virol. 33:193-211.

16. Zinkernagel, R.M. and R.M. Welsh. 1976. H-2 compatibility requirement for virus-specific T-cell mediated effector functions in vivo. I. Specificity of T cells conferring antiviral protection against lymphocytic choriomeningitis virus is associated with H-2K and H-2D. J. Immunol. 117:1495-1520.

17. Cooper, N.R., F.C. Jensen, R.M. Welsh, Jr. and M.B.A. Oldstone. 1976. Lysis of RNA tumor viruses by human serum: Direct antibody independent triggering of the classical complement pathway. J. Exp. Med. 144:970-984.

18. Welsh, R.M. Jr. 1977. Host cell modification of lymphocytic choriomeningitis virus and Newcastle disease virus altering viral inactivation by human complement. J. Immunol. 118:348-354.

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21. Merigan, T.C., M.B.A. Oldstone and R.M. Welsh. 1977. Interferon production during lymphocytic choriomeningitis virus infection of nude and normal mice. Nature 268:67-68.

22. Welsh, R.M. and M.B.A. Oldstone. 1977. Inhibition of immunologic injury of cultured cells infected with lymphocytic choriomeningitis virus: Role of defective interfering virus in regulating viral antigenic expression. J. Exp. Med. 145:1449-1468.

23. Welsh, R.M., Jr. and R.M. Zinkernagel. 1977. Heterospecific cytotoxic cell activity induced during the first three days of acute lymphocytic choriomeningitis virus infection in mice. Nature 268:646-648.

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Immunol. 121:475-481.

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P. Pincetl. 1980. Restriction specificities, alloreactivity and allotolerance expressed by T cells from nude mice reconstituted with H-2 compatible thymus grafts. J. Exp. Med. 151:376-399.

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Immunol. 132:2183-2184.

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75. Biron, C.A., R.J. Natuk and R.M. Welsh. 1986. Generation of large granular T lymphocytes in vivo during viral infection. J. Immunol. 136:2280-2286.

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